

AMENDMENTS TO THE CLAIMS

In the Claims:

A listing of the claims is as follows:

What is claimed is:

1. (Currently Amended) A multiple beam scanning device for scanning a plurality of light beams across a light receiving member, the multiple beam scanning device comprising:
an array light source including at least a first and a second ~~a plurality of a sub-~~ array light ~~source sources~~, the second sub-array light source being used whereas the first sub-array light source remains unused, each sub-array light source the second sub-array light source being configured to emit ~~emitting~~ a plurality of light beams with independently modulatable ~~modulated~~ light intensity, wherein the first sub-array light source may be functionally substituted for the second sub-array light source; and
an optical unit that converges the light beams emitted from any one of the first and second sub-array light sources and simultaneously scans the light beams in parallel ~~and~~ with equidistant spacing across the light receiving member.

2. (Currently Amended) The multiple beam scanning device as claimed in claim 1, further comprising:

a detection unit that detects when the second ~~a presently-used~~ sub-array light source ~~of the plurality of sub-array light sources~~ is defective[[,]] while the second ~~presently-used~~ sub-array light source is ~~presently~~ emitting the plurality of light beams to be scanned by the optical unit; and

a switching unit configured to switch from the second ~~that switches~~ a sub-array light source to the first ~~use from the presently-used~~ sub-array light source to a different one of the plurality of sub-array light sources when the detection unit detects that the second ~~presently-used~~ sub-array light source is defective.

3. (Currently Amended) The multiple beam scanning device as claimed in claim 2, wherein the detection unit includes a light detection unit that detects light intensity of each light beam emitted from the second ~~presently-used~~ sub-array light source, the detection unit detecting that the second ~~presently-used~~ sub-array light source is defective when the light detection unit detects that the light intensity of at least one of the plurality of light beams emitted from the second ~~presently-used~~ sub-array light source is outside a predetermined range.

4. (Currently Amended) The multiple beam scanning device as claimed in claim 1, wherein the array light source further includes a common base for each ~~all~~ of the at least first and a second sub-array light sources, and each of the at least first and a second sub-array light sources include ~~including~~ the same number of semi-conductor lasers formed integrally on the common base.

5. (Currently Amended) The multiple beam scanning device as claimed in claim 4, wherein the semi-conductor lasers of each of the at least first and second sub-array light sources are arranged in a first direction, and each of the at least first and second ~~the~~ sub-array light sources is ~~are~~ arranged in a second direction perpendicular to the first direction.

6. (Currently Amended) A multiple beam scanning device for scanning a plurality of light beams across a light receiving member, the multiple beam scanning device comprising:

an array light source including at least a first and second ~~a plurality of~~ a sub-array light ~~source sources~~, the second sub-array light source being used whereas the first sub-array light source remains unused, ~~each sub-array light source~~ the second sub-array light source being configured to emit a plurality of light beams with independently modulatable light intensity wherein a first sub-array light source may be functionally substituted for a second sub-array light source of the plurality of sub-array light sources; and

a drive unit configured to drive ~~that drives the~~ a selected one of the sub-array light source of the first and second sub-array light sources to emit the light beams, wherein a selection unit connects the selected sub-array light source to the drive unit.

7. (Currently Amended) The multiple beam scanning device as claimed in claim 6, further comprising a detection unit that detects when the second ~~selected~~ sub-array light source is defective, wherein the selection unit selects the first sub-array light source ~~a different one of the sub-array light sources~~ when the detection unit detects that the second ~~currently selected~~ sub-array light source is defective.

8. (Original) The multiple beam scanning device as claimed in claim 6, wherein the array light source further includes a common base for all of the sub-array light sources, each of the sub-array light sources including the same number of semi-conductor lasers formed integrally on the common base.

9. (Original) An image output device comprising:
a light receiving member; and
the multiple beam scanning device of claim 1.
10. (Currently Amended) The image output device as claimed in claim 9, wherein the multiple beam scanning device further includes:
a detection unit that detects when the second ~~a presently-used~~ sub-array light source of the ~~plurality of sub-array light sources~~ is defective, wherein the second ~~presently-used~~ sub-array light source is ~~presently~~ emitting the plurality of light beams to be scanned by the optical unit; and
a switching unit that switches a sub-array light source in ~~[[to]]~~ use from the second ~~presently-used~~ sub-array light source to the first ~~a different one of the plurality of~~ sub-array light sources when the detection unit detects that the second ~~presently-used~~ sub-array light source is defective.
11. (Currently Amended) The image output device as claimed in claim 10, wherein the detection unit includes a light detection unit that detects light intensity of each light beam emitted from the second ~~presently-used~~ sub-array light source, the detection unit detecting that the second ~~presently-used~~ sub-array light source is defective when the light detection unit detects that light intensity of at least one of the plurality of light beams emitted from the second ~~presently-used~~ sub-array light source is outside a predetermined range.
12. (Original) The image output device as claimed in claim 9, wherein the array light

source further includes a common base for all of the sub-array light sources, each of the sub-array light sources including the same number of semiconductor lasers formed integrally on the common base.

13. (Original) An image output device comprising:
a light receiving member; and
the multiple beam scanning device of claim 6.

14. (Currently Amended) The image output device as claimed in claim 13, wherein the multiple beam scanning device further includes a detection unit that detects when the second ~~selected~~ sub-array light source is defective, and the selection unit selects ~~[[[a]] the first different one of the~~ sub-array light source ~~sources~~ when the detection unit detects that the second ~~currently selected~~ sub-array light source is defective.

15. (New) The multiple beam scanning device of claim 1, where any sub-array light source of the at least first and second sub-array light sources may be functionally substituted for any other sub-array light source of the at least first and second sub-array light sources.

16. (New) The multiple beam scanning device of claim 6, where any sub-array light source of the at least first and second sub-array light sources may be functionally substituted for any other sub-array light source of the at least first and second sub-array light sources.